**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

HEADWATER RESEARCH LLC
 	
    Plaintiff,
 	
v.
 	
SAMSUNG ELECTRONICS CO., LTD and
SAMSUNG ELECTRONICS AMERICA, INC.,
 	
    Defendants.
	Case No. 2:23-cv-00641-JRG-RSP
	
	JURY TRIAL DEMANDED

SAMSUNG'S RESPONSIVE CLAIM CONSTRUCTION BRIEF

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I.   INTRODUCTION

The limitation "the calling device application," which appears in independent claims 1 and 14 of U.S. Patent No. 9,647,918 ("'918 patent), is indefinite. The term lacks both explicit and implied antecedent basis such that a person having ordinary skill in the art ("POSITA") would not know the scope of the claimed invention with reasonable certainty. Claims 1 and 14 leave a POSITA to wonder about the identity of "the calling device application" and whether it refers to the "first call" or the "second call." In its Opening Claim Construction Brief (Dkt. No. 72) ("Opening Brief"), Headwater attempts to reauthor the disputed claims so that "the calling device application" is the application that calls the "second API." But neither the plain language of the claims nor the specification supports such a modification. Headwater also insists that Samsung's invalidity positions in its IPR petitions conflict with its indefiniteness argument here, but such an argument ignores otherwise clear case law holding that a claim may be both indefinite and, simultaneously, invalid for lack of novelty. The Court should find claims 1 and 14 indefinite.

II.   LEGAL STANDARD

"[A] patent is invalid for indefiniteness if its claims, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention." *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 901 (2014). The definiteness requirement of 35 U.S.C. § 112 ¶ 2 is not satisfied where a term lacks explicit antecedent basis and "such basis is not otherwise present by implication or the meaning is not reasonably ascertainable." *CardWare Inc. v. Samsung Elecs. Co.*, No. 2:22-CV-141-JRG-RSP, 2023 WL 5434763, at *10 (E.D. Tex. Aug. 23, 2023) (quoting *Halliburton Energy Servs., Inc. v. M-I LLC*, 514 F.3d 1244, 1249 (Fed. Cir. 2008)).

III.   OVERVIEW OF '918 PATENT

The '918 patent is directed to associating wireless network data usage with media objects (e.g., audio or video files) supplied by applications and reconciling the wireless network data usage to track aggregate usage. *See, e.g.*, '918 patent at Abstract, 1:23-36, 115:29-116:38, 116:59-117:24, 117:29-52, Cl. 1, Cl. 14. Claims 1 and 14 require a "wireless end-user device" that includes both a "first network stack Application Programming Interface (API)" that contains a "first call" (i.e., a request) to "open and use data packet flows" and a "second API" that contains a "second call" to prompt a "media service manager" to manage application-requested "network data transfers" for "media object[s]." *See id.* at Cl. 1, Cl. 14. One or more agents "associate wireless network data usage" for "media object network data transfers" with the application that requests them. *See id.* at Cl. 1, Cl. 14. "[W]ireless network data usage" for the application is subsequently "reconcile[d]" to "track an aggregate wireless network data usage attributable" to each application via both APIs. *See id.* at Cl. 1, Cl. 14.

Headwater mischaracterizes the specification and the disputed claims. *First*, Headwater contends that the "wireless end-user device" claimed by the '918 patent "allows applications to request data transfers over a network stack either *directly* via a first call to a network stack application programming interface (API), or *indirectly* via a second API call to a proxy media service manager." Opening Brief at 2 (emphasis added). The claims do not recite these terms, and any implication that the limitations "directly" and "indirectly" should be read into claims 1 and 14 is improper. Indeed, nothing in the specification or prosecution history rises to the level of lexicography or disclaimer necessary to read these terms into the claims. Claims 1 and 14 instead require that the "at least one first call" and the "at least one second call" be "accessible" to each of

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the device applications. *See* Cls. [1.3]-[1.4].[1] The plain and ordinary meaning of "accessible"

includes both "direct" and "indirect" accessibility.

Second, Headwater contends that "[r]egardless of whether the application (1) transfers data

via a first API call to the network stack *or* (2) transfers data by proxy via a second API call to the

proxy media service manager, the claimed device can associate data transfers with the requesting

device application," which "allows the device to track an application's aggregate data usage for

both types of calls (via the first *or* second APIs) attributable to the application." Opening Brief at

2 (emphasis added). Any implication that the application can either interface with the network

stack via the "first network stack API" or interface with the network stack via the "second API"—

but never use both avenues for measuring data usage—contradicts the plain and ordinary meaning

of claims 1 and 14. Indeed, Headwater's statement ignores the requirement that "one or more

service classification and measurement agents . . . reconcile wireless network usage for each of the

plurality of device applications to track an aggregate wireless network data usage attributable to

each of the plurality of device applications via *both* the first network stack API *and* the second

API." Cl. [1.6] (emphasis added). In other words, the disputed claims require a "reconcil[iation]"

of "wireless network data usage" information from the "first network stack API" *and* "second

API." With no explanation, Headwater improperly swaps the "and" for an "or."

Third, Headwater contends that Figure 32 of the '918 patent illustrates a "dual-path

approach" where "Application 3202 can directly interface with Network Stack 3208 via the left-

most vertical arrow and can also indirectly interface with Network Stack 3208 via Proxy Service

Manager 3206." Opening Brief at 2-3. This characterization, however, ignores the third path

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[1] For simplicity, Samsung adopts Headwater's identifying structure for claim 1 of the '918
patent as found in Headwater's Opening Brief at 4.

depicted in Figure 32 where Application 3202 communicates with Proxy Service Manager 3206 through Control Application 3204. *Id.* at 3. Headwater makes no attempt to explain how this third path relates to the disputed claims.

Fourth, Headwater contends that the use of virtual tagging "solve[s] the socket-level data being insufficient to identify the Application 3202 as the initiator of the data flow." *Id.* But neither claim 1 nor claim 14 (or any of the other claims of the '918 patent) require virtual tagging. Headwater makes no attempt to explain how virtual tagging is related to the claim construction issue at hand or the asserted claims in this case.

IV.   LEVEL OF ORDINARY SKILL IN THE ART

Samsung submits that a POSITA would have had (1) at least a bachelor's degree in computer science, computer engineering, electrical engineering, or a related field, and (2) at least two years of industry experience in wireless communication network applications and software. Additional graduate education could substitute for professional experience, and vice versa. Headwater does not dispute this proposal in its briefing. *Id.* at 5.

V.   ARGUMENT

"the calling device application" ('918 patent, claims 1 & 14)

Headwater's Proposed Construction	Samsung's Proposed Construction
Not indefinite; plain and ordinary meaning	Indefinite

The limitation "the calling device application" is indefinite for lack of antecedent basis. As detailed below, a POSITA would not know with reasonable certainty what the "the calling device application" is or whether the antecedent in the term refers to the "at least one first call" to the "first network stack API" or the "at least one second call" to the "second API." Headwater attempts to rewrite claims 1 and 14 so that "the calling device application" is the application that calls the

"second API," but this effort should fail because courts repeatedly reject such attempts to amend claim language.

A.   The Element "the calling device application" Is Indefinite for Lack of Antecedent Basis

The lack of clear antecedent basis for the limitation "the calling device application" renders claims 1 and 14 indefinite as failing to "inform those skilled in the art about the scope of the invention with reasonable certainty." *Nautilus*, 572 U.S. at 910.

The term "calling device application" appears for the first time in claim [1.4], preceded by "the":

Identifier	Claim Language
[1.3]	a first network stack Application Programming Interface (API), containing at least one first call accessible to each of a plurality of device applications, the first network stack API callable by each of the plurality of device applications to open and use data packet flows via the network stack, the wireless modem, and the at least one wireless network;
[1.4]	a second API containing at least one second call accessible to each of the plurality of device applications, the second API callable by each of the plurality of device applications to make a data transfer request for a media object associated with a network resource identifier supplied by ***the calling device application***;

While failure to provide explicit antecedent basis is not always fatal, antecedent basis by implication must nonetheless exist or else the claim is indefinite. *See Adaptix, Inc. v. Huawei Techs. Co. Ltd.*, 74 F. Supp. 3d 832, 840-43 (E.D. Tex. 2014) (finding the disputed claims indefinite because a claim term lacked antecedent basis by implication); *Sol IP, LLC v. AT&T Mobility LLC*, No. 2:18-CV-00526-RWS-RSP, 2020 WL 60141, at *10-12 (E.D. Tex. Jan. 6, 2020) (Judge Payne) (refusing to rewrite the disputed claim and finding it indefinite because "the recited 'set of bits' is not synonymous with the 'second modulated sequence' or the 'third modulated sequence'").

Here, no such implication exists. A POSITA would not know with reasonable certainty what the "the calling device application" is. Claim [1.3] requires a "first network stack API callable by each of the plurality of device applications." Claim [1.4] further requires a "second API callable by each of the plurality of device applications." In other words, both the "first network stack API" and the "second API" *are capable of being called* by each of the plurality of device applications. But no application has called an API at this point in the claim. Claim [1.4] then requires "a network resource identifier supplied by the calling device application," but the identity of "the calling device application" is unknown, leaving a POSITA to guess as to the source of "a network resource identifier."

Further still, the lack of antecedent basis renders unclear the identity of the "call" that "the calling device application" accesses. Claim [1.3] requires a first network stack API "containing at least one first call" that is "accessible" to each of the applications. The applications can call the first network stack API "to open and use data packet flows." Claim [1.4] requires a second API "containing at least one second call" that is "accessible" to each of the applications. The applications can call the second API "to make a data transfer request for a media object associated with a network resource identifier," which is "supplied by the calling device application." But the antecedent basis issue makes it unclear to a POSITA as to whether "the calling device application" accesses the "first call" or the "second call" when "suppl[ying]" the "media object associated with a network resource identifier." In other words, a POSITA would not know with reasonable certainty whether the antecedent in the term "the calling device application" refers to the "first call" or the "second call."

Accordingly, the lack of antecedent basis renders claims 1 and 14 indefinite.

B.   Headwater Rewrites the Disputed Claims to Try to Avoid Indefiniteness

Because Headwater cannot adequately defend the claim language as written, Headwater endeavors to reauthor the disputed claims so that "the calling device application" is the application that calls the "second API." For example, Headwater argues that claim [1.4] "describes a network resource identifier and says the identifier is 'supplied by' the specific device application that is making the call to the second API." Opening Brief at 6. But claim [1.4] does not state that "the calling device application" *calls* the "second API"; claim [1.4] instead requires that "a media object associated with a network resource identifier [is] *supplied by* the calling device application." As another example, Headwater argues that "the device application that requests the data transfer for the media object" in claim [1.6] refers to "the specific application that calls the second API and requests a data transfer for the media object" in claim [1.4]. Opening Brief at 7-8. But neither claim [1.6] nor claim [1.4] require "the calling device application" to call the "second API."

These attempts to amend the disputed claims should be rejected by the Court. *See K-2 Corp. v. Salomon S.A.*, 191 F.3d 1356, 1364 (Fed. Cir. 1999) ("Courts do not rewrite claims; instead, we give effect to the terms chosen by the patentee."); *PSC Comput. Prods., Inc. v. Foxconn Int'l, Inc.*, 355 F.3d 1353, 1357 (Fed. Cir. 2004) (citation omitted) ("Courts can neither broaden nor narrow the claims to give the patentee something different than what he has set forth."). Headwater could have drafted the disputed claims to require that "the calling device application" call the "second API" if that was intended, but instead chose not to specify, a decision that removes requisite certainty.

C.   Intrinsic Evidence Outside the Disputed Claims Themselves Does Not Save Them Either

Headwater's attempt to save the disputed claims with various specification citations likewise fails. *See* Opening Brief at 8-9. For instance, Headwater argues that "[b]ecause the request

is from an application and includes a network resource identifier, the data transfer can be attributed

to the specific application." *Id.* at 8. But this interpretation misses the issue at hand as it still does

not identify "the calling device application" of claims 1 and 14, or whether the antecedent refers

to the "first call" or the "second call." Headwater adds that Figure 32 discusses the addition of a

"virtual tag" that is "sent from the flow tracking agent 3212 . . . to the app usage/flow mapping

engine 3214." *Id.* But the disputed claims do not require virtual tagging, a flow tracking agent, or

an app usage/flow mapping engine, and Headwater makes no attempt to relate these terms to the

disputed claims.

Relatedly, Headwater's assertion that Samsung's indefiniteness argument should fail

because Samsung did not provide citations to the specification or prosecution history in the Joint

Claim Construction and Prehearing Statement is flawed. *See id.* at 9. As detailed above in section

V.A, the antecedent basis issue alone in claims 1 and 14 renders these claims indefinite. There is

nothing in the intrinsic evidence that identifies "the calling device application" or which call it

accesses, so Samsung has no other intrinsic evidence to cite. Clear and convincing evidence of

indefiniteness lies in the claims themselves.

D.   Extrinsic Evidence Is Not Necessary to Prove Indefiniteness

Headwater's assertion that Samsung cannot prove indefiniteness without an expert

declaration contradicts established precedent. *See id.* That Courts can find indefiniteness without

considering any extrinsic evidence such as expert testimony is axiomatic. *See Interval Licensing*

LLC v. AOL, Inc., 766 F.3d 1364, 1370 n.6 (Fed. Cir. 2014) ("[W]e find it unnecessary to rely on

[expert] testimony (or any other extrinsic evidence) to reach our conclusion. Like the district court,

we find the claims indefinite based on the claims, the written description, and the prosecution

history."); *see also Motion Games, LLC v. Nintendo Co.*, No. 6:12-cv-878-JDL, 2015 U.S. Dist.

LEXIS 180229, at *9-10 (E.D. Tex. Jan. 16, 2015) (finding that expert evidence was not necessary

to decide a motion for summary judgment of indefiniteness); *Prolifiq Software Inc. v. Veeva Sys. Inc.*, No. C 13-03644 SI, 2014 WL 3870016, at *8 n.6 (N.D. Cal. Aug. 6, 2014) ("Although expert testimony is generally helpful in determining whether a claim is indefinite, expert testimony is not always required to make that determination."). Afterall, intrinsic evidence is "the most important consideration in a claim construction analysis" and often alone will resolve any claim construction disputes. *Medytox, Inc. v. Galderma S.A.*, 71 F.4th 990, 997 (Fed. Cir. 2023); *see UTTO Inc. v. Metrotech Corp.*, 119 F.4th 984, 993 (Fed. Cir. 2024) ("In many cases, claim construction is properly done based on intrinsic evidence alone."). Notably, Headwater cites no authority to support its assertion that the Court cannot find the disputed term indefinite without expert testimony from Samsung. *See* Opening Brief at 9.

> **E. Samsung's Representations in its IPR Petitions Do Not Conflict with its Assertion of Indefiniteness Here**

The Court should disregard Headwater's criticism that "Samsung's indefiniteness assertion is . . . undermined by its representations to the PTO" in Samsung's two IPR petitions challenging the validity of claims 1 and 14 of the '918 patent. Opening Brief at 9-11. Courts and the Patent Office both recognize that a claim may be both indefinite and, simultaneously, invalid for lack of novelty over the prior art. *See, e.g.*, *Intel Corp. v. Qualcomm Inc.*, 21 F.4th 801, 813 (Fed. Cir. 2021) ("The indefiniteness of a limitation . . . precludes a patentability determination only when the indefiniteness renders it logically impossible for the Board to reach such a decision."); *Target Corp. v. Proxicom Wireless, LLC*, IPR2020-00904, Paper 11 at 12 (P.T.A.B. Nov. 10, 2020) ("Petitioner's alternative pleading before a district court is common practice, especially where it

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concerns issues outside the scope of *inter partes* review.").[2] Therefore, Samsung can assert invalidity before the Patent Office while maintaining that the disputed claims fail to inform a POSITA about the scope of the invention with reasonable certainty. Additionally, Samsung's indefiniteness argument here should come as no surprise to Headwater considering Samsung's reservation in its IPR petitions: "[Samsung] is not conceding that each challenged claim satisfies all statutory requirements, nor is [Samsung] waiving any arguments concerning claim scope or grounds that can only be raised in district court." '918 IPR Pet. 1 at 2 (Ex. 4 of Opening Brief); '918 IPR Pet. 2 at 2 (Ex. 6 of Opening Brief). Accordingly, Headwater's argument is without merit.

VI.   CONCLUSION

Samsung respectfully requests that the Court find claims 1 and 14 of the '918 patent indefinite.

Dated: March 7, 2025   Respectfully submitted,

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[2] Available at https://ptacts.uspto.gov/ptacts/public-informations/petitions/1535781/download-documents?artifactId=bguzNDEgO5jlKgp7xCpXpm2vFUwK0rhjnOaaeixCoQ2QemtDVVwlfA0.

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<u>CERTIFICATE OF SERVICE</u>

I hereby certify that a true and correct copy of the foregoing document was filed electronically in compliance with Local Rule CV-5 on March 7, 2025. As of this date, all counsel of record had consented to electronic service and are being served with a copy of this document through the Court's CM/ECF system under Local Rule CV-5(a)(3)(A).

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/s/ Christopher O. Green
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